

## DOCUMENT RESUME

ED 388 618

SP 036 224

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TITLE Learning To Teach in Multicultural Contexts:  
Exploring Preservice Teachers' Knowledge Change. Part  
I: Group Patterns. Part II: Case Studies. Draft.  
PUB DATE Apr 95  
NOTE 55p.; Paper presented at the Annual Meeting of the  
Council for Exceptional Children (Indianapolis, IN,  
April 1995).  
PUB TYPE Reports - Research/Technical (143) --  
Speeches/Conference Papers (150)  
EDRS PRICE MF01/PC03 Plus Postage.  
DESCRIPTORS Attitude Change; Beliefs; Case Studies; Cultural  
Differences; Cultural Pluralism; Elementary  
Education; Higher Education; Knowledge Base for  
Teaching; \*Multicultural Education; \*Preservice  
Teacher Education; \*Teacher Attitudes; Teaching  
Methods  
IDENTIFIERS Concept Maps; Diversity (Student); \*Preservice  
Teachers

## ABSTRACT

This study examined the impact of multicultural education courses on preservice teachers' pedagogical knowledge and beliefs about culturally diverse learners. Part 1 reports on a study of 20 preservice teachers pursuing a masters degree in elementary education enrolled in a required multicultural education course and were examined for their attitudes as a consequence of taking the course. All but one student were female; 10 were White, 6 were Hispanic American, 2 were Asian, and 2 were Fillipino. The course was designed to develop a conceptual framework to understand and deal with differences and to help teachers become aware of how personal attitudes affect how an individual deals with difference. Data were collected using concept mapping and a survey to assess the preservice teachers' beliefs. Results indicated that students exhibited distinct patterns of conceptual change after the course. Part 2 presents two case studies based on in-depth interviews augmenting existing data of two individuals who had participated in the first study. Results indicated that though the two shared some similarities, they pursued distinct pathways in their changing conceptualizations of good teaching for diverse students. One tended to use her personal experiences while the other relied heavily on her family values to educate students. (JB)

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ED 388 618

## Learning To Teach In Multicultural Contexts: Exploring Preservice Teachers' Knowledge Change

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### PART I: GROUP PATTERNS

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## PART I: GROUP PATTERNS

The increasing diversity of the student population and their concomitant poor performance (Hodgkinson, 1991) have prompted educators and policy makers to reform teacher education programs (TEP). The main goal of these changes is to prepare teachers to teach culturally diverse learners (CDLs). For this purpose, multicultural education courses have been infused in the curriculum of TEPs. Presumably, these (and other similar) measures will help preservice teachers to become more sensitive to the needs of CDLs and will equip them to better teach this population.

Unfortunately, there is a dearth of empirical evidence on the impact of these efforts and most studies have not examined this issue using a cognitive view of teachers' labor (Grant & Secada, 1990). The purpose of this study is to contribute to the knowledge base on the preparation of teachers for diversity. Specifically, we examined the impact of a multicultural education course on preservice teachers' pedagogical knowledge and beliefs about CDLs.

### Research Questions<sup>1</sup>

- Do preservice teachers' pedagogical knowledge about CDLs change after enrolling in a course on multicultural education? If yes, are there distinct patterns of change in preservice teachers?
- Do preservice teachers' beliefs about CDLs change after enrolling in a course on multicultural education? If yes, are there distinct patterns of change in preservice teachers?

First, we describe the results for a subgroup of students enrolled in the multicultural education course. Next, we outline the changes experienced in a one-year period by two members of each group.

## METHOD

### Participants and Context

- Twenty preservice teachers enrolled in a required multicultural education course were selected for this study. The course was offered in the winter quarter of 1994. Participants were pursuing a M.Ed. and a credential in elementary education. There were 19 female and one male student. The ethnic composition of the group was 10 white, six Chicanas, two Asian, and two Filipino students. Their average undergraduate GPA was 3.60 (range = 3.1 - 4.0).

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<sup>1</sup> This study is based on a constructivist framework in which teachers are seen as learners who perennially construct knowledge to refine their practice.

### The Multicultural Education Course

- The goals of the course were (a) to develop a conceptual framework to understand and deal with differences and (b) to become aware of the personal component in the way one deals with issues of difference. The course was taught in the first five weeks of the quarter to allow students to start doing observations in schools in the second half of the quarter. Students attended class three times a week for two or three hours every day (i.e., 40 credit hours). The course was based on a sociocultural view of human diversity that included gender, socioeconomic status, ethnicity, race, language, and religion as central elements for the study of culture. The course's theoretical orientation was consistent with Banks and Banks' (1993) and Cushner, McClelland, and Safford's (1992) conceptualizations of culture and human diversity. Individual reflection was emphasized throughout the course as a sine qua non trait of effective teachers of CDLs.
- Lectures, guest speakers, films, group discussions and assignments, and laboratory activities were used to facilitate the discussion, integration, and application of course content. Course assignments included (a) a report on an eight-hour interaction (or observation) with a person (or setting) of a different culture, (b) group reports on discussions about particular readings, (c) a written analysis of curricular materials using a multicultural lens, and (d) a theoretically-based analysis of a debate about racism published in the university newspaper.

### The Teacher Education Program (TEP)

- The TEP is housed at a public university in the state of California. Students complete the requirements of this graduate TEP in one academic year and two summers. The TEP awards M.Ed. and credentials in elementary and secondary education. Critical emphases in this program are cultural diversity, urban education, and social justice. A bilingual education specialization in Spanish is also offered.

### Instruments

- Concept mapping "is a procedure developed for tracing conceptual change that has been used in several studies of teacher education" (Morine-Dersheimer, 1993, p. 15). Concept maps are useful and sensitive tools to assess conceptual change in preservice teachers (Morine-Dersheimer et al., 1992).
- A survey to assess preservice teachers' beliefs about CDLs (McDiarmid & Price, 1990) was used in this study. The survey contains 31 questions on career plans and views on issues of teaching and learning CDLs (e.g., teacher roles, planning,

grouping, instruction, and evaluation). The survey questions contain a variety of formats that include Likert scale, ranking, and multiple-choice items.

### Data Collection and Analysis Procedures<sup>2</sup>

#### Concept Maps

- Concept maps were constructed in class during the first and last sessions of the course. Participants were asked to construct a concept map on "Effective Teaching for CDLs." The same standardized instructions and examples were used for the pre- and post-maps (see Figure 1 for a sample concept map).
- Originally, 45 students enrolled in this course. The density for all concept maps was calculated following a standard procedure (Morine-Dershimer, 1989). The density measure takes into account the structural characteristics of maps, "including the number of main categories and the number of levels to which categories were developed" (Morine-Dershimer, 1989, p. 47).
- Two groups were identified based on the density changes in the concept maps. Group A's students (n = 11) decreased the complexity of their maps after the course. All students in this group were female. Their ethnic composition was: six White, two Chicanas, two Asian, and one Filipino. Their average undergraduate GPA was 3.64 (range = 3.21 - 4). Students in Group B (n = 9) increased the density of their maps at the end of the course. There was a male student in this group and their ethnic composition was: four Chicanas, four White, and one Filipino. Their average undergraduate GPA was 3.54 (range = 3.10 - 3.99).
- A content analysis of concept maps was also conducted and a category system was developed (see Table 1 for a list of categories). After all maps were analyzed and coded, centrality and specificity of categories were calculated. "Centrality was determined by the level at which the category was first introduced on the map (i.e., proximity to the central concept). Degree of specificity was determined by the proportional frequency of items associated with the category (number of items in the category divided by the number of items on the map)" (Morine-Dershimer, 1993, p. 17).
- A grid system created by Morine-Dershimer (1993) for concept maps was used to depict quantitative changes and shifts in emphasis by categories. We used the data on both centrality and specificity to construct these grids. Hence, the grids

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<sup>2</sup> Participation was voluntary throughout the study and thus, some students participated in activities at the beginning but not at the end of the course. In addition, the Los Angeles 1994 earthquake occurred during this quarter. This event affected student attendance and student availability to conduct some of these activities.

not only show how central each construct is for the participants, but also how much detail is provided for each construct.

### Surveys

- Students completed the surveys at home, thus, not everyone returned the completed instruments. Responses to survey questions were summarized using descriptive statistics.

## **RESULTS**

### Conceptual Change

#### Group A

The four most central categories that were mentioned in Group's A preconcept maps were Content, Instructional Materials/Resources, Teacher Beliefs/Principles, and Instructional Processes (see Figure 2). Content was the category most central to the main hub. Instructional Processes was the category that was most elaborated upon even though it was the least central category of the four.

The greatest changes in the postconcept maps were: (a) a dramatic lessening in Centrality for Content, and (b) greater centrality for the categories Goals, Student Characteristics/Background, and Instructional Materials/Resources (see Figure 3). Similarly, Goals and Student Characteristics/Background notably increased their specificity levels. Once again, Instructional Materials/Resources, Teacher Beliefs/Principles, and Instructional Processes were central categories. It should be noted that whereas only four categories had a centrality score below four in the preconcept maps (i.e., they were more important for this group), the number of categories placed in the same area increased to eight in the postconcept maps.

#### Group B

Similar to their counterparts, students in Group B emphasized in their premaps issues related to Instructional Materials/Resources, Teacher Beliefs/Principles, and Instructional Processes (see Figure 4). Nonetheless, compared to Group A, there were several differences in the emphasis and detail provided to these categories. For instance, although Instructional Processes had a higher centrality (compared to Group A), Group B students provided less detail to this category. Likewise, Teacher Beliefs/Principles and Instructional Materials/Resources were more central to students in Group B. Similar to Group A, Instructional Materials was the most central category in the preconcept map. A unique feature of these students' premaps was the emphasis on Parental Involvement, Goals, and Professional Issues.

In the postconcept map, the four most important categories are Teacher Beliefs/Principles, Parental Involvement, Instructional Processes, and Goals (see Figure 5). Instructional Materials/Resources decreased substantially its centrality. It should be noted that items coded as Content were not relevant for this group before or after the course. In contrast to Group A, students in Group B decreased the number of main categories after the course (i.e., six categories had a centrality score below 4 in the premap whereas only four categories were placed in the same area in the postmaps).

### Beliefs

#### Similarities Among Groups

- Where to Teach? The majority of participants consistently expressed interest in teaching in urban areas.
- Teacher Roles. Both groups did not think their roles as teachers was to teach American mainstream values. However, they thought teachers' role is to teach subject matter and to foster critical thinking in their students.
- Use of Language in the Classroom. Both groups did not think all students should be taught in English though their views on the use of dialects in the classroom was more moderate. That is, they recommended that dialects could be used in "informal" situations (e.g., expressive writing or conversations) but that standard English should be used in "formal" speech and writing.
- Student Ability. Their views on student ability were mixed or at least not clear. They both agreed and disagreed with statements that reflected an innate view of ability.
- Individualized Instruction. Both groups embraced an individualized view of instruction (i.e., tailored to unique interests and abilities).
- Performance Evaluation Standards. Compared to Group B, students in Group A were more inclined to profess that the same standards be used to evaluate all students. At the end of the course, however, both groups were against the use of universal standards for all students.

#### Differences Among Groups

- Ability Grouping and Tracking. Although both groups tended to disagree with ability grouping and tracking procedures, students in Group B seemed to be slightly more open to the idea of ability grouping at the end of the course.



- Teacher Attributions for Pupil Failure. At the beginning of the course, students in Group A attributed pupil failure to teacher (ineffective methods, inattention to uniqueness, effort) and student factors (home background and effort) (see Figure 6). After the course, they attributed it to student effort and teacher factors (effort, inattention to uniqueness, ineffective methods).

Group B, on the other hand, was more categorical in its views. Before the course, they attributed failure to teacher inattention to uniqueness, teacher ineffective methods, teacher effort, and student ability. Nevertheless, at the end of the course these participants attributed failure to a narrower range of factors, namely teacher ineffective methods and teacher inattention to uniqueness (see Figure 7).

- Strategies for Diverse Classrooms. Figure 8 shows that Group A originally selected a constructivist strategy and a human relations approach (foster self-esteem) to teach in diverse classrooms. At the end of the course, the range of choices increased to other approaches, though the critical theory model was not selected before or after the course.

The majority of students in Group B, on the other hand, began the course embracing a narrower range of approaches to teach in diverse classrooms (see Figure 9). Interestingly, at the end of the course these students were divided about the strategies to use when teaching in diverse classrooms. Their choices represent a wider range of positions in the political spectrum.

## DISCUSSION

The course on multicultural education had a differential impact on students. Quantitative indicators show that students in Group A simplified the structure of their conceptualizations about effective teaching for diverse students at the end of the course. However, a closer scrutiny of these students' maps also indicate that the number of core categories emphasized (i.e., categories with a centrality score  $\leq 4$ ) increased at the end of the course. In other words, although these students' conceptualizations about effective teaching were more complex at the beginning of the course, they focused on a reduced number of aspects or categories. This pattern was inverted at the end of the course. Interestingly, students in Group B exhibited the opposite pattern.

At the end of the course, students in Group A defined effective teaching for diverse students as a construct primarily related to instructional and curricular issues. They also emphasized student characteristics. In contrast, students in Group B tended to be more concerned with broader issues. Although they also included in their concept maps instructional and curricular aspects, they were interested in professional issues and parental involvement. Thus, to answer the first question of this study, the evidence shows that these students exhibited distinct patterns of conceptual changes after the course. In turn, this conclusion raises a number of questions that include: Did students in Group A embrace a "technical" view of this construct? According to this



view, teaching should take into account where the "source" of cultural diversity resides (i.e., pupil traits) to instruct diverse students. It is interesting to note that although the course emphasized a broader conception of diversity, these students seem to have adopted a traditional view of cultural diversity.

In contrast, students in Group B possess a view of teaching that takes into account broader issues (professional issues, parental involvement). These dimensions are consistent with the focus of the course, except that these students tended to downplay the role of instructional and curricular issues. Thus, it is pertinent to ask, why did these groups think that either instructional or social context issues should be prominent in their conceptualizations of effective teaching for diverse students? Why certain curricular, instructional, and social context categories (e.g., Lesson/Unit Plans, Evaluation & Feedback, and Systemic Issues) were not salient issues for neither group? How are these two broad orientations reflected in other cognitive and behavioral domains? Investigators need to include in future studies additional sources of information to answer these questions.

The beliefs reported by these groups reflect certain ambivalence about particular issues (e.g., notions of student ability, use of language in the classroom). However, participants' attributions for pupil failure are reflected in their concept maps. Specifically, although both groups tended to explain pupil failure with teacher factors, Group A also offered student factors in their post-surveys — an aspect that was also salient in their postmaps. Likewise, student beliefs about the top strategies to use in diverse classrooms were consistent with the concept maps data. That is, students in Group A believe in the use of instructional approaches to diversity whereas Group B tended to select approaches that are based on broader societal issues — a pattern consistent with the emphases observed in their concept maps.

Hence, to answer the second question of the study, it can be concluded that certain beliefs changed whereas others remained inert. Indeed, this uneven and ambiguous profile of beliefs is not the ideal outcome that teacher educators expect to see in their students. In reality, however, these patterns reflect the actual situation in this field of study. Specifically, although educators agree on a number of broad issues, there is still considerable disagreement about how to address cultural diversity in the classroom. Oftentimes, theoretical issues are confounded with personal and societal perceptions, attitudes, and stereotypes about cultural diversity. These findings may be influenced by personal or professional development dilemmas. Unfortunately, there is a dearth of sound interdisciplinary theoretical frameworks that integrate the knowledge base on multicultural education with the literatures on novice teacher development and socialization.

Moreover, the quantitative shifts noted in the concept maps raise interesting questions about the desirable outcomes of this type of courses. Indeed, these findings have enormous implications for program evaluation purposes. Should teacher educators be concerned with the complexity of their students' conceptualizations about

diversity? Or with the breadth of aspects included in their conceptualizations? (Or, should we say, is the pattern exhibited by Group B "better" than Group A's?) How are these patterns reflected in the attitudes, interactive decisions, and behaviors of these preservice teachers? What is the role of subject matter knowledge in their conceptualizations? Indeed, these queries need to be addressed in future studies for they will allow us to understand the processes of meaning making and knowledge transformation that preservice teachers experience in the area of cultural diversity.

**Table 1**

**Category System used to Code Concept Maps**

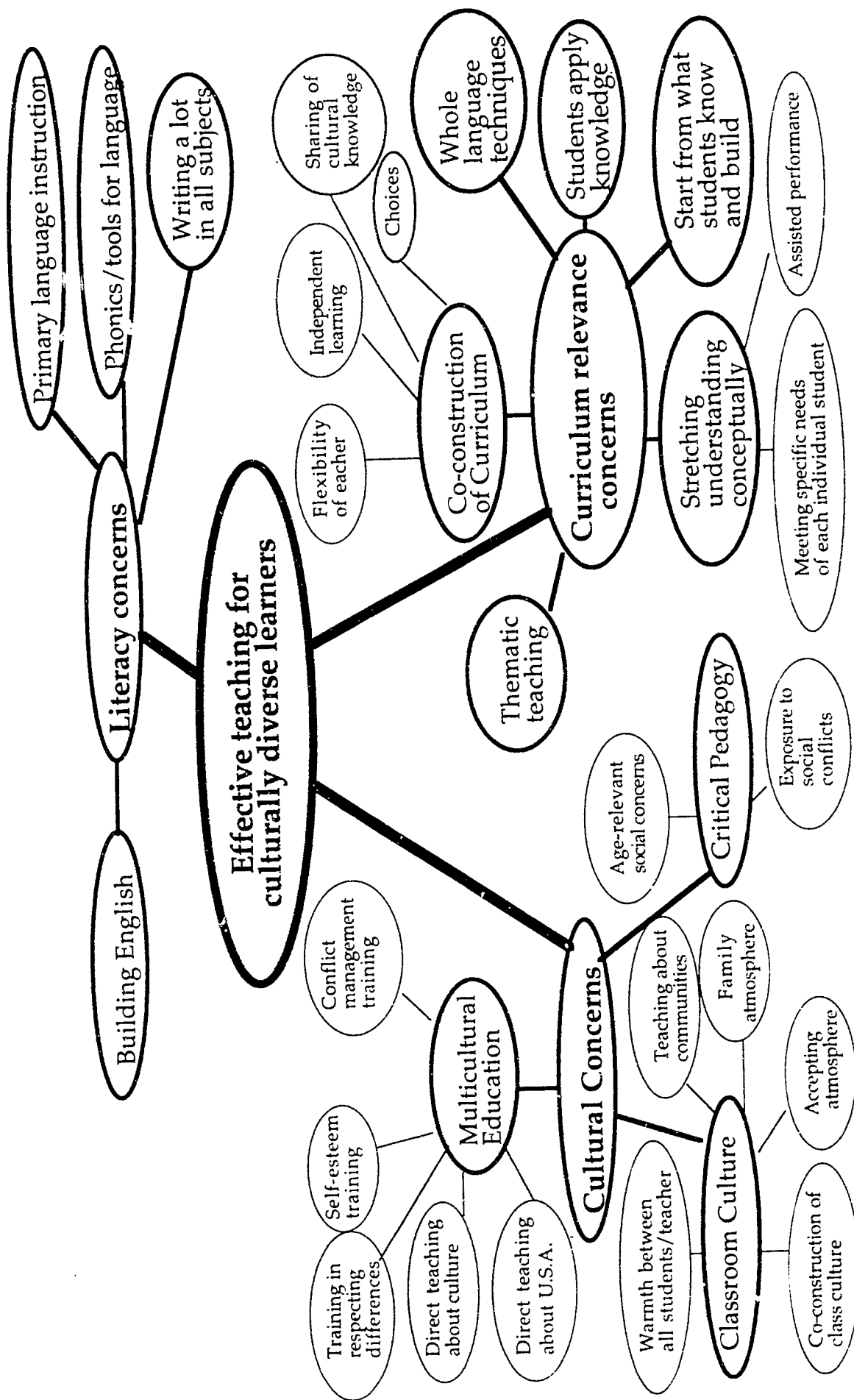
Categories	Subcategories	Areas/Examples
<b>CURRICULUM</b>		
	Goals (G)	Objectives for the year (4 approaches to MEd) Problem-solving skills IEPs
	Content (C)	Reading Science Poetry Creative writing
	Instructional Materials Resources (IM/R)	Books People Agency/Organization
	Lesson/Unit Plans (L/UP)	Daily lesson plans Unit plans Long-term planning
<b>INSTRUCTION</b>		
	Classroom Management (CM)	Student behavior Physical organization Classroom climate
	Instructional Processes (IP)	<ul style="list-style-type: none"><li>• <u>Models</u>: Bilingual and special ed</li><li>• <u>Theory</u>: critical theory, constructivist, ecological</li><li>• <u>Instructional methods</u>: Cooperative learning, field trips</li></ul>
	Evaluation and Feedback (E&F)	Tests, grades, pupil feedback Self-evaluation

(Table 1 continues ...)

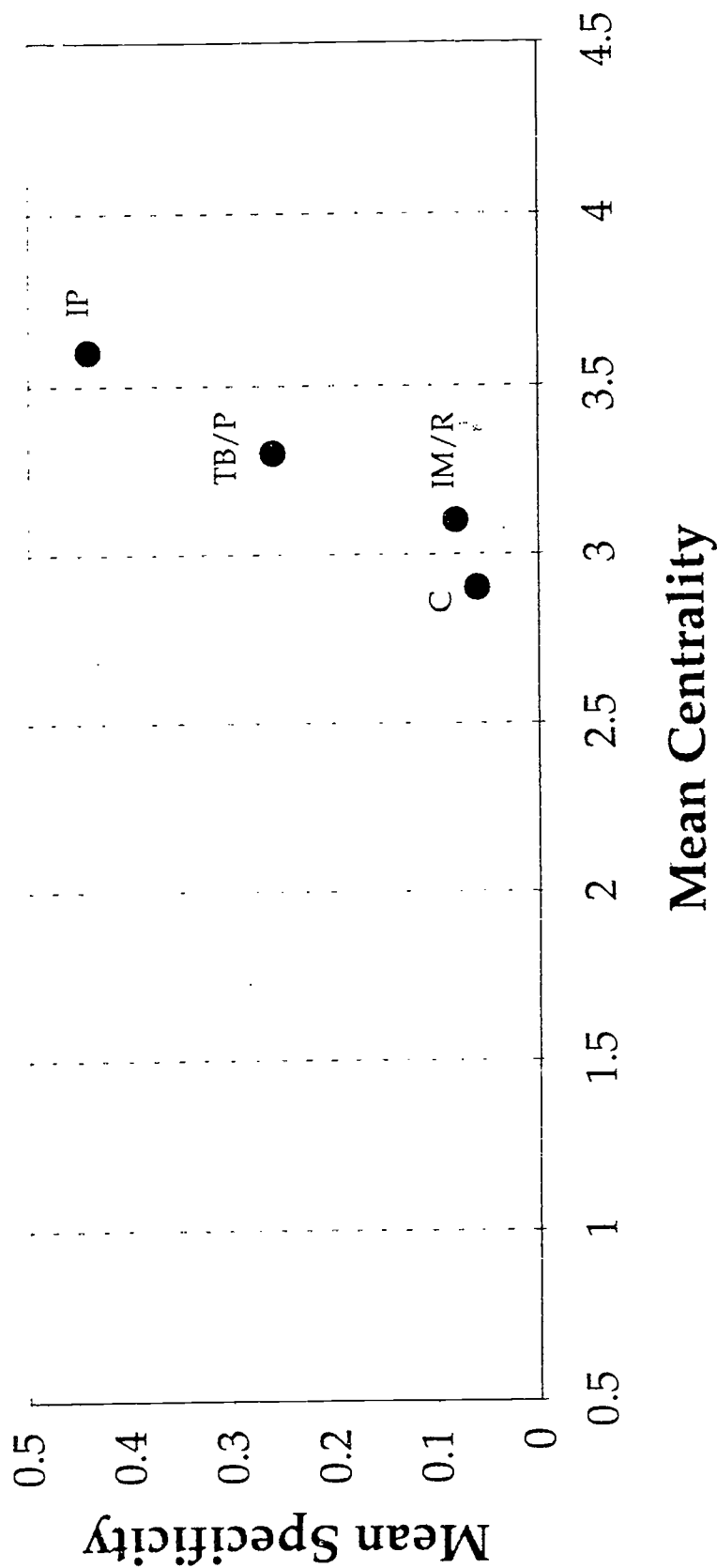
**Table 1** (Continued)

Categories	Subcategories	Areas/Examples
<b>SOCIAL CONTEXT</b>		
	Student Characteristics/ Background (SC/B)	Physical Affective, attitudinal, emotional Cognitive, intellectual, motivational
	Teacher Beliefs/ Principles (TB/P)	Instructional Attitudinal "Integrate subjects" "Variety of instruction"
Professional Issues (P. ISS.)	• Professional Knowledge	Familiar with material Knowledge of research
	• Professional Relations	Thinking about the profession Teacher education (?) Cooperation, collaboration, consultation with colleagues and administrators
	Family/ Parental Involvement (P. INV.)	Roles School policies
	Systemic Issues (SI)	School--organizational, ethos, policies: School/District levels Society--economic, political factors

Figure 1. Concept Map Sample

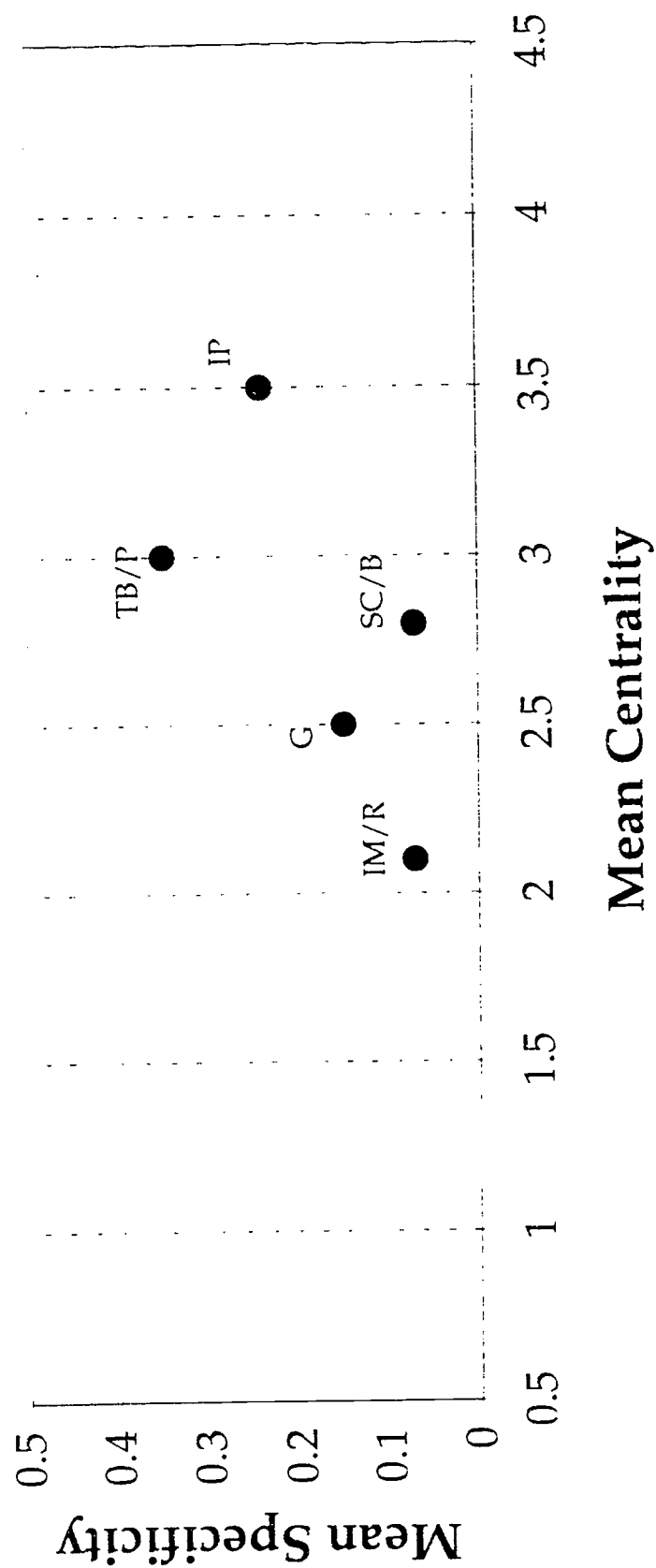


**Figure 2. Preconcept Map - Group A**





**Figure 3. Postconcept Map - Group A**



**Figure 4. Preconcept Map - Group B**

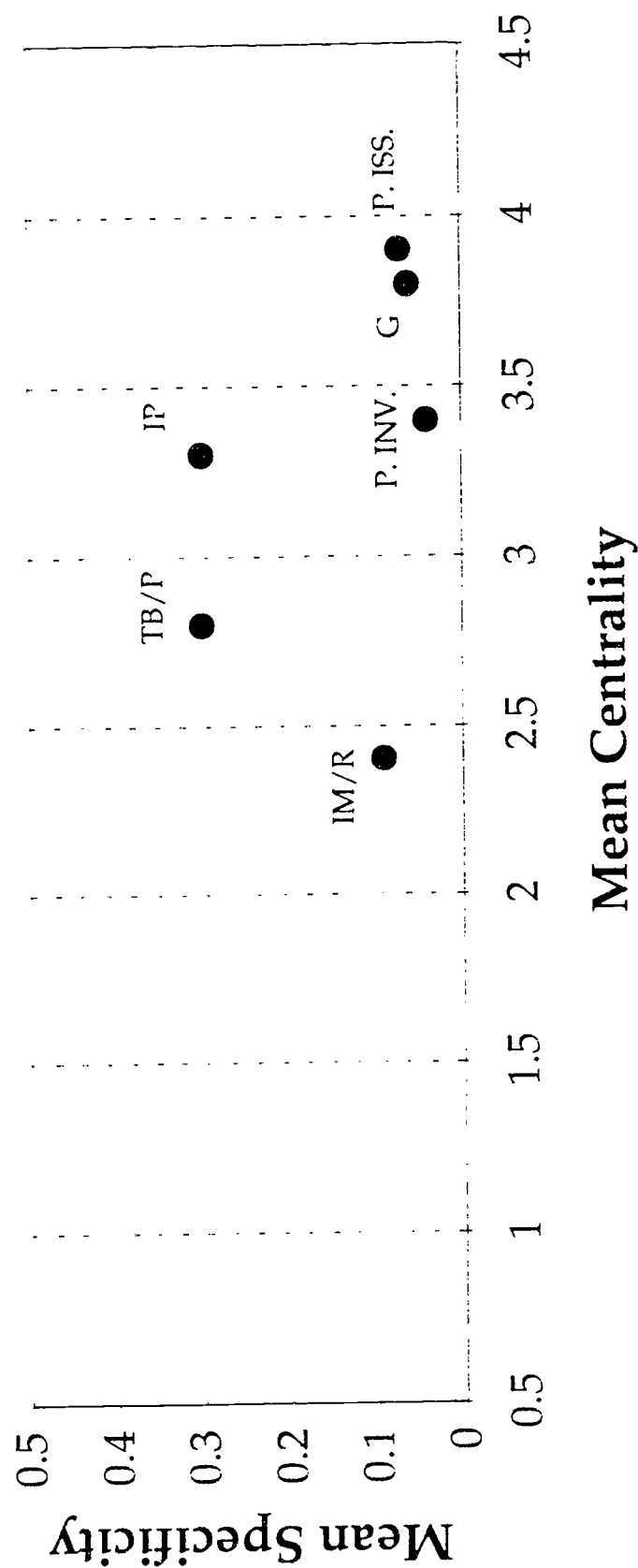
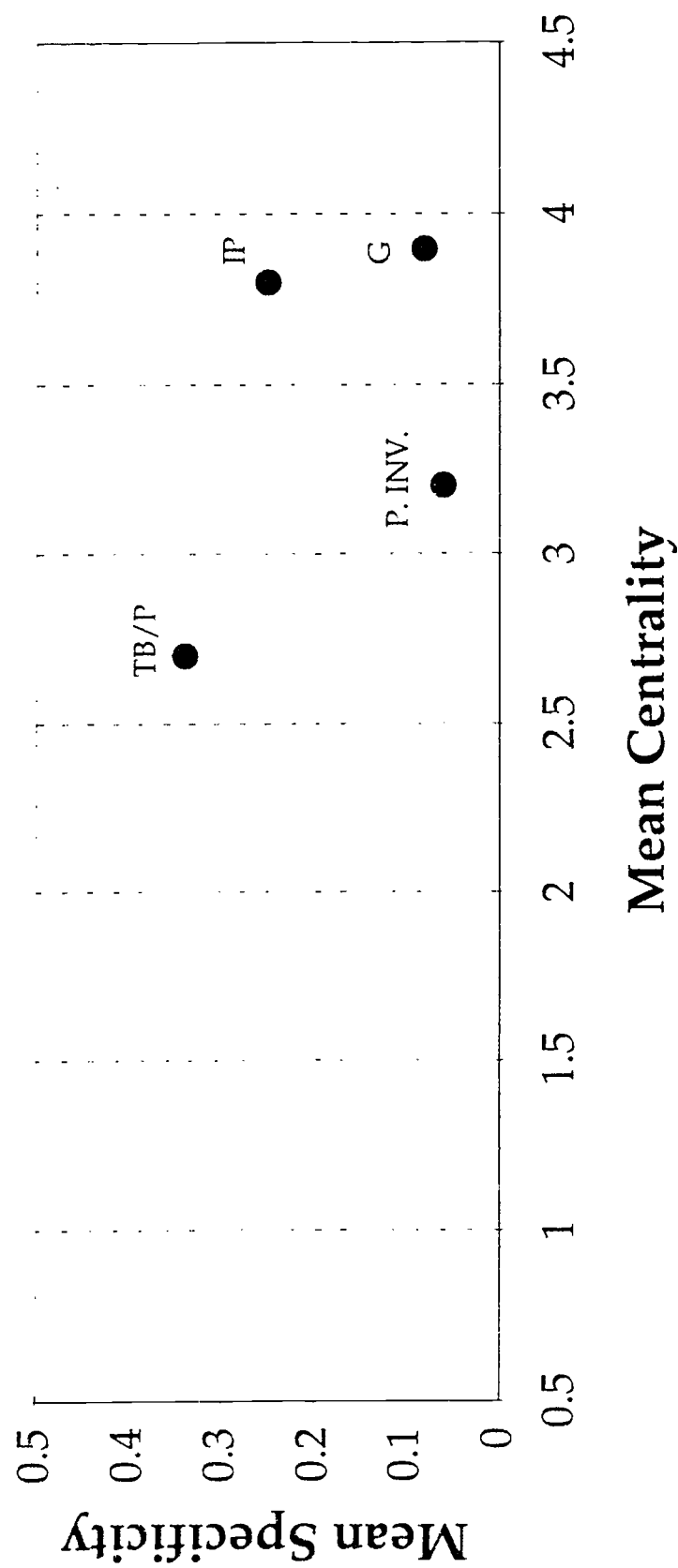
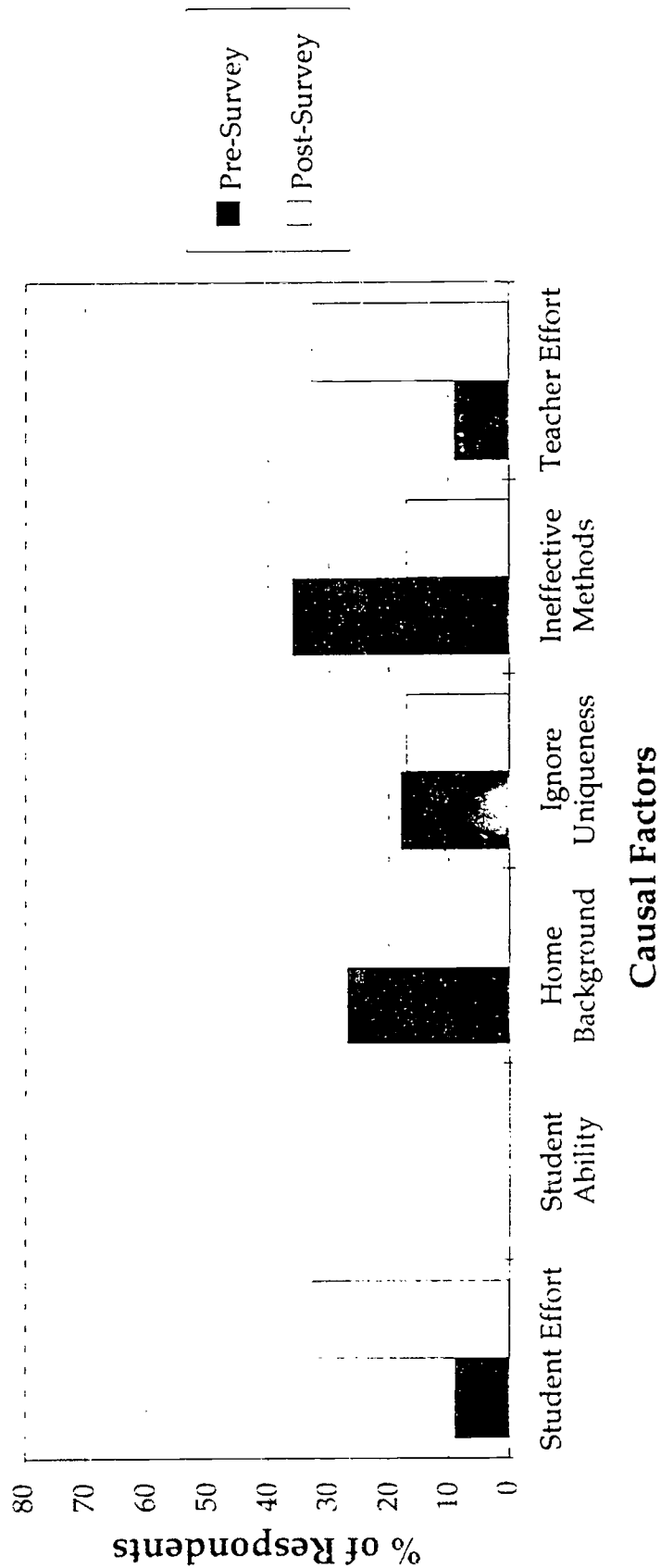


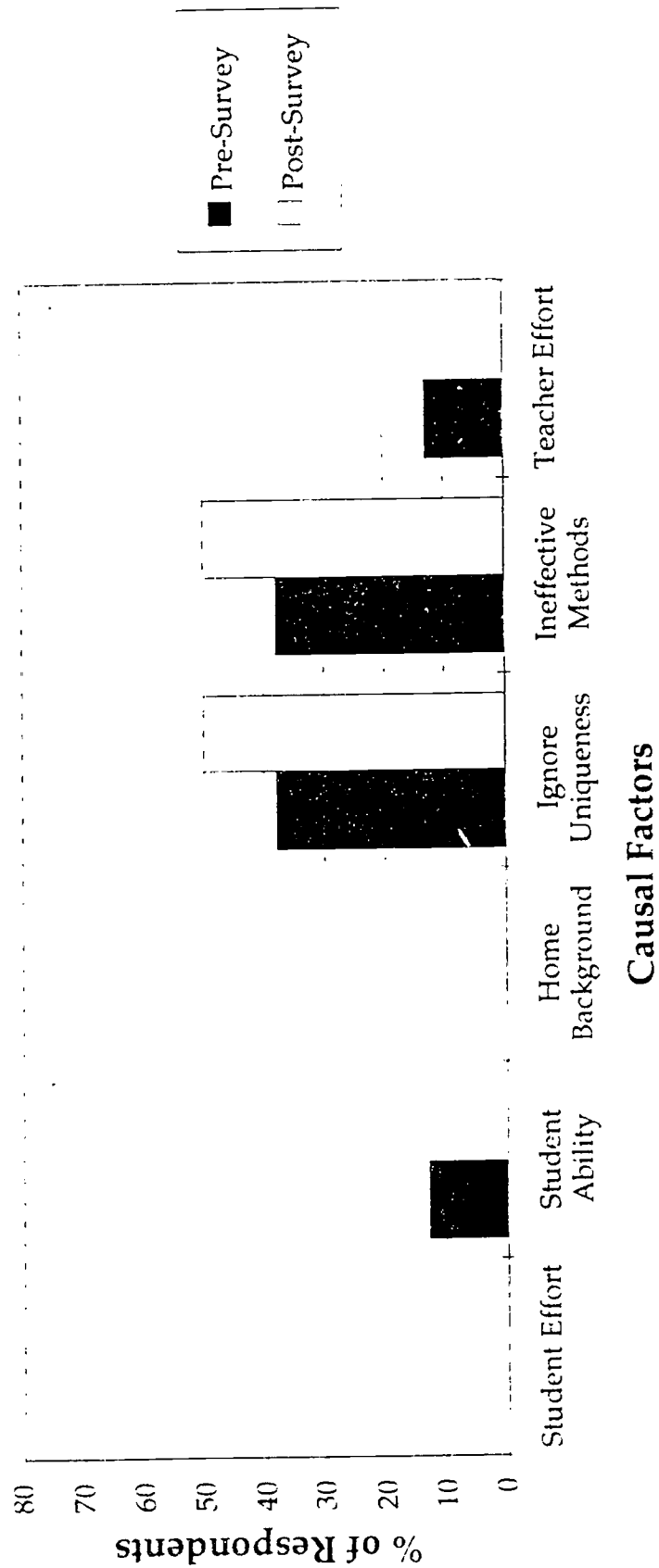
Figure 5. Postconcept Map - Group B



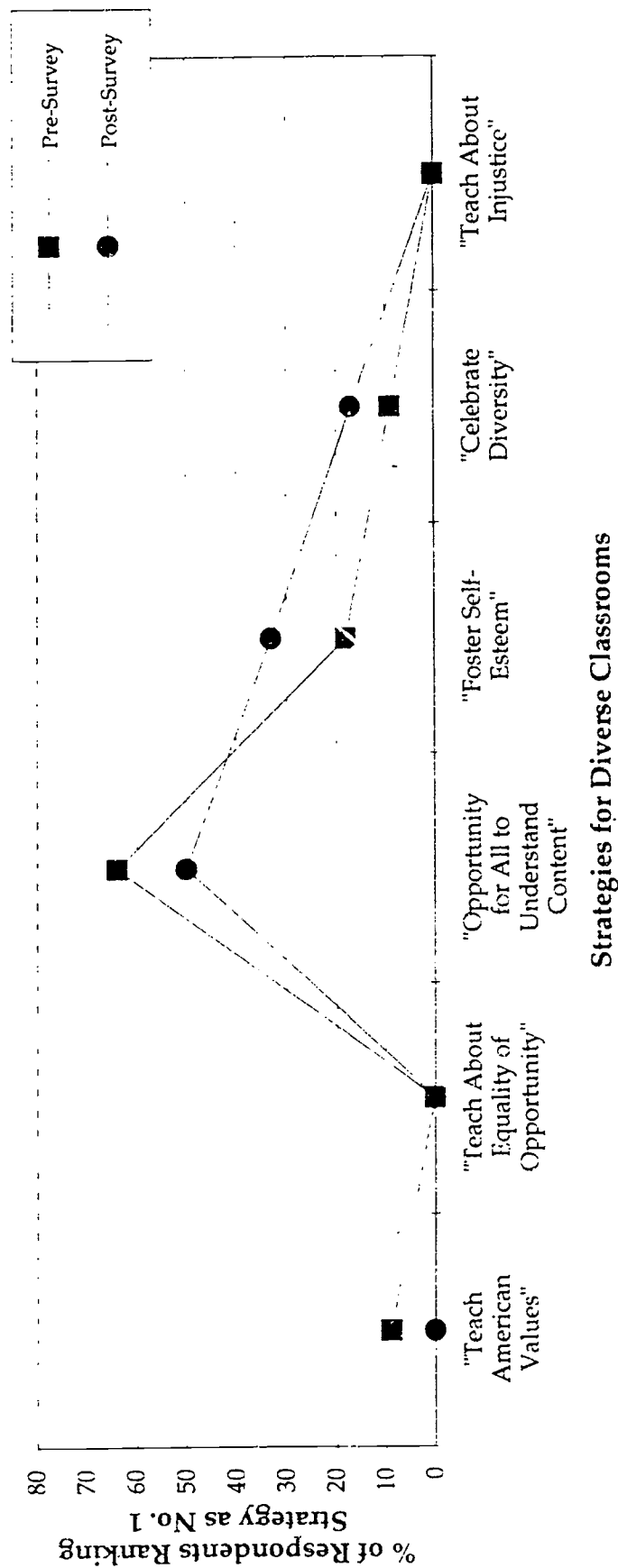
**Figure 6. Sources of Student Failure - Group A**



**Figure 7. Sources of Student Failure - Group B**

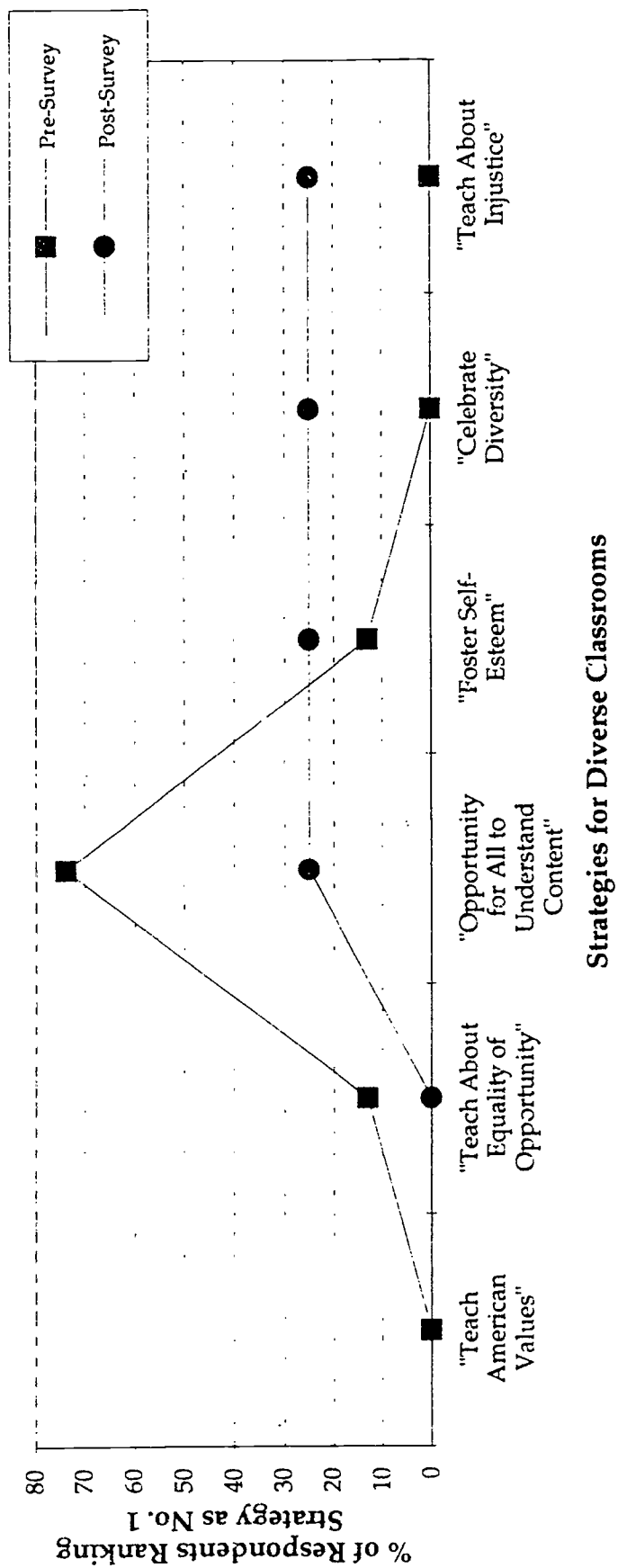


**Figure 8. Top Strategies to Use in Diverse Classrooms**  
**Group A**





**Figure 9. Top Strategies to Use in Diverse Classrooms  
Group B**



**Learning To Teach In Multicultural Contexts:  
Exploring Preservice Teachers' Knowledge Change**

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**PART II: CASE STUDIES**

## PART II: CASE STUDIES

We decided to select at random one case from each group to delineate a clearer profile of change. After all, group trends do not depict the particularities of an individual teacher's change process. In addition, we were interested in tracing conceptual change across time. Thus, we decided to follow these cases during their student teaching period and their first year of teaching.

We are currently analyzing the data from stimulated recall interviews to assess the connection between teacher cognitions and interactive decisions during lessons. These data were gathered during the student teacher period and also during the winter of the follow-up year. We will subsequently include these data in the final report of this study.

### METHOD

#### Participants

- Students from Group A (Ann) and Group B (Beverly) participated in this portion of the study. Both students were white (Ann identified herself as Jewish in the follow-up survey). During the multicultural education course, the participants were working to obtain a M.Ed. and credentials in both elementary and bilingual education. The two teachers are fluent in Spanish. Beverly presently teaches in fourth grade and Ann in second grade at two distinct urban schools.

#### Data Collection and Analysis Procedures

- Concept maps were constructed before and after the winter course, and during the fall of their first year as inservice teachers. As part of the follow-up, they also wrote an essay on the changes they saw in their three concept maps. Furthermore, during an in-depth interview conducted during the fall of the follow-up year, these students reflected on the changes they saw in their three concept maps. The in-depth interview was designed to assess teacher beliefs about CDLs and about effective instruction for CDLs.
- Moreover, participants completed the McDiarmid and Price (1990) survey before and after the course, though Beverly did not return the post-survey. Similarly, both students completed it again during the fall of the follow-up phase.
- The same data analysis procedures used with the groups were used to reduce and interpret the concept map and survey data from the cases. Interviews

were audiotaped and transcribed for subsequent analysis. Transcripts were content-analyzed.

## RESULTS

### Conceptual Change

Preconcept, postconcept, and follow-up concept maps were compared for each participant teacher. For clarity, only categories that had greater centrality (i.e., values  $\leq 4$ ) are depicted in the maps, as well as categories that demonstrated major shifts from one phase of the study to the next. It should be noted that the maps for the cases may not necessarily mirror all of their group's trends since the group maps are based on mean values.

For Ann, Teacher Beliefs/Principles was the most central category, followed by Goals and Instructional Processes in the preconcept map (see Figure 1). Similar to Group A, Ann was concerned with the "how-to" of teaching as reflected by the latter two categories. After the course, Ann increased the number of categories that were central in her thinking about this construct, with a notable emphasis on practical instructional issues, as reflected by the categories Goals, Instructional Materials/Resources, and Instructional Processes (see Figure 2). However, Ann also thought that Evaluation & Feedback issues were critical to define good teaching for diverse students. In fact, it seems that at the end of the course Ann had an evaluative view of good teaching for CDLs in which goals, evaluation, and materials were notably salient. Congruent with neophyte teachers' concerns, Classroom Management became more important for Ann. Note that although Teacher Beliefs/Principles remained an important aspect, its centrality decreased considerably after the course.

Up to this point, Ann's maps reflect Group A's major trends, namely an emphasis in a "technical" view of teaching for diverse students in which instructional aspects are emphasized. Almost one year after the course, however, it is noteworthy that her view of effective teaching for CDLs has become noticeably less complex. Specifically, only three categories remain central in her follow-up concept map (see Figure 3). These are Goals, Instructional Processes, and Classroom Management. It seems as if she has become concerned with a more pragmatic view of teaching in which only the things that need to be accomplished (goals), the means to accomplish them (instructional processes), and the strategies that will allow her to maintain classroom order and productivity (classroom management) should count. This is not surprising considering that inexperienced teachers tend to be overconcerned with these issues.

In turn, Beverly created a different preconcept map (see Figure 4). At the beginning of the course, and consistent with Group B, she included in her map instructional as well as other social context issues (parental involvement).

Although not as important as in Ann's maps, Teacher Beliefs/ Principles was relatively central to Beverly's conceptualization of effective teaching for diversity.

Moreover, Beverly's postconcept map is congruent with Group B's patterns (see Figure 5). Instructional Materials/Resources remained in the same position. Parent Involvement, Professional Issues, and Content emerged as the most central aspects after the course. In fact, all these categories increased the magnitude of both their centrality and specificity values. After taking the course, Beverly believes even more than ever that parents should increase their participation in the education of their children. Similar to Ann, the number of central categories increased in Beverly's postmap.

The follow-up concept map reveals that, similar to her pre-concept map, Instructional Materials/Resources is the most important aspect for Beverly (see Figure 6). In the same vein, Parental Involvement and Professional Issues continued to be central in defining effective teaching for CDLs. Interestingly, Beverly adds a new category, Student Characteristics/Background, as a fairly central category. Meanwhile, Teacher Beliefs/Principles tended to remain on the background of central categories. Unlike Ann, the number of central categories included in Beverly's follow-up map did not differ from her postmap.

### Beliefs

#### Similarities Among Cases

- Where to Teach? Both teachers have consistently expressed a desire to teach in urban settings.
- Use of Language in the Classroom. Similar to their groups' peers, both teachers expressed opposition to the mandatory use of English in classrooms. However, they also advocated for the use of standard English in "formal" speech and written language.
- Influence on their Teaching. Before and after the course, Ann did not think that her ideas about teaching came from her own experiences. However, both teachers reported during the follow-up that their ideas about teaching come from their own experiences and from their own family. For instance, Beverly said:

(...) a huge focus in my classroom is the effective curriculum. And I'm very big on, you know the book "Tribes?" "Tribes"-type activities, and interpersonal skills, and respect, and relationships. That's huge. That's the most — that's my focal point. I'm getting kids to speak to each other nicely, and interact with each other, and talk and listen to each other's ideas, and work well in groups. And those ideas come from my family.

[Interviewer: Was your mother a teacher?]

My mother was a teacher. But to me, they're more values, value-oriented. I try and talk to kids a lot in here about social responsibility and responsibility towards other people, and well, if you see, if you, okay the, this paint was spilled. Well I didn't do it! Well, okay, it doesn't matter that you didn't do it. You're part of this — you still have the response- — it's your social responsibility to clean up spilled paint when you see it. And those are values. Those are my family's values. Or speaking to each other with respect. Or hurting people's feelings. Or understanding — trying to perspective-take, and see how other people feel. And looking for injustices in the world, even if they don't apply to your specific group. That's from my family.

Similarly, Ann purported:

Um, well, I guess at the basis, they come from personal beliefs. Like, just my personality. Who I am, and what I believe, and what I've just developed as my set of beliefs over the years, that I've been thinking about things. Um, but, um, my education helped them along because it gave me the, um, right, I feel like my education gave me the right to believe the things that I believe. Legitimized a lot of my thinking. Maybe it didn't legitimize some of the other things that I believed. And maybe I've pushed those beliefs aside because I don't feel like they're valid. I don't even know if there are any, because if I pushed them aside, I wouldn't remember them. Um... And my beliefs come also from experience.

### Differences Among Cases

- Role of Teachers. Beverly's view on teachers' roles reflected a struggle between a teacher- and a pupil-centered approach. She defined teachers' role in terms of how to achieve particular learning outcomes. To wit:

It's just waiting for them to get the answer when it would be so easy to tell them is the hardest part! I think, I think it's really hard for teachers to relinquish that power. And even in management, it's difficult to step back and sort of let kids figure out their problems. Especially when you see them going in a — in the wrong direction or in the direction you don't want them to go in. But I think that's how kids learn — I really believe that. I believe that teachers should be there to assist kids in arriving at the answers themselves. And let kids figure em out — figure things out and help other kids. I believe that.

In contrast, Ann sees a teacher's role as a fulfiller of pupils' individual needs, and it's the pupil who defines the role of the teacher. From this perspective, she defines teachers' roles in terms of the functions they serve to students. To illustrate:

(...) whatever the students need. Whatever is asked of them by the students' needs. For instance in my classroom right now I have a kid who doesn't have a mother and he's — he cries because she just died a couple of years ago and he's just sort of coming to an awareness. So I provide, I think I provide a maternal figure to him. And I've just allowed it to happen. He clings to me, and I just let it happen. I don't put a boundary there. I don't say, "no, you have to treat me like a teacher." Um, then there's other kids, you know, who just want to be educated. They just want to come, and they ask questions, and they read books, and they're ready for their assignments, and their



homework, and they go home and they do it, and that's their need. It's like you've got 30 needs, and whatever those 30 needs are, you have to provide them individually.

- Willingness to Remain a Teacher. Ann has consistently manifested certainty about remaining a teacher. In contrast, although Beverly was sure at the beginning and end of the course, she was only "fairly certain" when the follow-up was conducted.
- Influence of the TEP in Learning to Teach. The teacher education program (TEP) had a somewhat different impact on these teachers. Beverly was ambivalent about the role the TEP played in her process of learning to teach. On one hand, the TEP was a negative influence:

[Interviewer: What role has (the TEP) played in your process of learning to teach?]

(Laugh.) They have confused me.

[Interviewer: In what way?]

No... [the TEP] was wonderful. I would be interested to hear what [the other teacher] said about this. But [the TEP] was wonderful because it showed me how good things could be. And these theories are wonderful. And I truly, truly believe in them. Most of them. But... (The TEP) gave me low self-confidence, because when I came into the classroom and I realized that some of these things, some of the theories you can't — aren't applicable all of the time, I started feeling badly about it, and I started feeling like I wasn't a good teacher. And I still feel that way a lot of the time. And at... in [the TEP] there's no flex- — the message I got is that there was one way to teach. Either you have everyone working in groups all the time, so you could never have kids in homogeneous groups, everyone had to be heterogeneously grouped. You had to have critical pedagogy, kids had to generate answers. All the time. And so when I don't do that, I feel awful, and I feel like I'm damaging these children.

On the other hand, the TEP had a positive impact on Beverly, though she has decided to "store" this knowledge and use it in certain situations or activities. In her own words:

But it was helpful because I never, never would have thought about the implications of my actions. I mean, I probably would have grouped kids by ability, had I not gone through [the TEP]. Because that's how I was grouped. And so it exposed me to new ideas and new strategies for teaching. And you know, because — I knew, but I look back over things, or I come across something here and there, or something comes into my head, and I say "Oh yeah, I'll, I'll have readers' theater. Oh I learned about that, and these are the reasons why I should do readers' theater." And so it gave me all of these skills that I'm just storing them and poco a poco [little by little]. I think it'll help me more — [the TEP] will help me more in the long run.

[Interviewer: In what sense?]

In the sense that now I feel like I'm holding all this information in this little compartment in my head. And every so often I open the door. Okay, [the TEP] time. Okay close the door. And I do something that [the TEP] taught me. When I feel comfortable enough with everything else. But some of it just flows. But that could be my style. And you know also it helped me recognize and identify what things were positive. A lot of times in my class kids start having discussions and debating with themselves and having these wonderful interactive conversations. And had I not gone through [the TEP] and not realized how wonderful this was, I might have cut it short or moved on, or not had it be so student — my curriculum be so student-generated. Even though it might have felt right to me, I wouldn't have thought it was educationally sound. And so [the TEP] validated those ideas for me.

In contrast, Ann did not have a negative view of the TEP's influence.  
To wit:

It's a huge resource for me. Every time I think of something I want to teach, I think of a hundred things that people did with that concept during the year and that they shared with me. I have all of these ideas on file. And I pull people's lesson plans and units and ideas, and I — or I remember people's ideas and I use them. Um, and also um, my classes with um, with [Professor X] and [Professor Y], um they gave us a lot of practical stuff and a lot of whole language activities. And I try to run my classroom with a lot of whole language activities. So just the nuts and bolts. That's what I'm talking about right now.

However, like Beverly, she is also "saving" the information she acquired in the TEP for when she is "ready" to use it. For example, when reflecting about the changes in her concept maps, Ann said:

And I think that's probably what the education was for. Not so that the first year you could become this wonderful, exquisite, terrific teacher that can do everything, and give everybody everything that they should have really in education, but just to prepare you to remember it, so that when you do get organized and have your act together, you can really start to apply the bigger concerns.

In two subsequent sections of the interview, Ann also said:

Well, I think that what I received in [the TEP] lives inside of me. But the practical applications... It comes out in the practical applications as well. But I think that that's one of those things that's gonna come later for me, when I have got it together and I can, I can get through a day without feeling like something completely got messed up! (Laugh.)

(...) I haven't been able to do all that I want to do with that information. It's floating around in there, and I'm planning for a time when I can, can use it in the ways that I want. There are a lot of things I wanted to do that I haven't been able to do, that were due to my learning at [the TEP]. But I wouldn't be the kind of teacher I am today without [the TEP]. I'm a different teacher than I would have been. So in that, I am using it.

- Ability Grouping and Tracking. Although both teachers presumably opposed to ability grouping and tracking while enrolled in the TEP, they started to change their views during their first quarter as a teacher. For instance, Ann said:

Well, there's a lot of different ways I group them. But for language arts, I didn't have a choice for part of it, because they go to this computer lab and the language arts computer lab technician decided she wanted them group by homogenous ability groupings. Which is convenient sometimes, other times it's disappointing. For math, I have them grouped in ability groupings for part of the time and mixed ability groupings for the other part of the time. When they're in centers doing independent learning, they're in mixed ability groupings so that they can work off of each other. And when they're with me, I have them separated by ability so that I can focus in on the ones that really need extra help without boring the other ones to death. So when we're doing directed lessons, they're homogeneously grouped. They're heterogeneously — and then for social studies, they're always heterogeneously grouped so that the people who talk and who think a lot are with the kids who haven't developed in that area yet so that they can be pushed along by those other kids.

In the same vein, Beverly reported:

I group them almost always, almost all day. (...) I group them in different ways. I group them by language, all Spanish readers and all English readers, for their language arts. We're reading *Charlotte's Web*. And then they go off, and when I read—when we read out loud, we read separately to read out loud. I might have one group reading quietly by themselves and then I'll read out loud with the other group and then I send them back to read a chapter by themselves and then I read out loud with the other group. And then we do an activity together. So everybody's doing the same activities, so that my students will get the enrichment in their native language, I do higher level thinking discussions in the native language.

Later she explained:

I have in math, I have them grouped just heterogeneously, and then they rotate through centers. I have two parents that come in at math, and so I rotate the groups through different centers with each parent. And then I have a group of 10 kids who can't add and subtract. And the rest of my class, I think it's about eight kids who can't add and subtract and don't know any multiplication tables, and the rest of my class is on division. And so I have the, one of the parents working with these kids. And so I guess that's a homogeneous group right there. 'Cause they know they need extra help. And other kids, unfortunately, know they need extra help. And they work with the parent and then they work with me and then the parent works with the class.

- Attributions for Pupil Failure. Before the course, Ann ascribed pupil failure to teacher inattention to uniqueness. After the course, she imputed failure to teacher lack of effort. For the follow-up, however, she purported it was the discontinuity between pupils' home background and school:

I think just... An environment at home that doesn't match the environment at school. Like if they don't have books at home and they don't have educated people at home,

then they're not gonna be enriched educationally in the way that we teach in education. They might be enriched in other ways. They might be able to do all kinds of other neat things, but whatever I'm doing here in terms of reading and writing and math, they don't have that experience at home. So that, and that occurs more often in an impoverished or stigmatized group.

Similarly, Beverly has reported throughout the study that pupil failure is due to their home backgrounds. However, during the follow-up interview, she distinguished between high- and low-achievers. She explained low-achieving pupils' failure in the following manner:

Probably for the low-achieving culturally diverse learners, one of the failure, one of the failures would be when teachers don't give them the kind of attention that they deserve, kind of like what I'm describing that I do. (Laugh.)

Ironically, the situation is even more despairing for the culturally-diverse, high-achieving group. She explained that social expectations will make them fail, no matter how hard they try. To wit:

But anyway, and for the high ones.... I don't know. It's really hard because I think about this a lot. There's a lot of social, a lot of social stuff that comes, that really hinders them as they get up. I don't think you would really notice it as much in this learning community where I am because it's very supportive of bilingual education and cultural diversity... Is the word coddle? We really coddle those kids, but... I'm afraid for them as they, in the upper elementary level. Um... I talk to my kids, even though they're fourth grade, I talk to them a lot about college. And I know that half of them, well, won't be going to college 'cause they're not going to be able to afford to go to college, and it's not even going to occur to them no matter how much I talk about it. Then I think, well, here I am imposing my values again about the importance of college and education. I don't know, I think it's social.

I think a lot of it, as they get older, social expectations within their own communities and within general community, general society. We tell kids, take a little kid in my class, and we say 'oh, you know, you have to work hard. Work hard all through high school so you could go to college.' But, I mean, what if she, she's, college isn't an option for her. What if it, financially, is not an option. That she has to leave and she has to work and help her family. So she would think, well why should I work hard. It's hard to teach the value of learning in that respect. And that's what I mean about social factors.

- Expectations for Low-Achieving Pupils. Before and after the course, both teachers reported that instruction for low-achieving students should not be based on minimum competency objectives. However, during the follow-up interview both teachers made distinctions about how they teach high- and low-achieving students. To illustrate, Ann reported:

Yes, in that, well, only slightly differently. Like they all get the same experiences. Or the same types of experiences. Like they'll all get some rote, like drill stuff. And they'll all get really fantastic literature experiences, like acting and art through, art

about, art that deals with literature and whatever they're studying and all kinds of those things. But, um, the ones that are having trouble, I talk to their parents about drilling them at home, um... And I give them materials to take home that are drill-type materials. I'll... I put them in reading remediation where they have drilling and things like that. Or I'll take a low group and I'll talk about phonics more with them. For instance in reading — the high group, they don't need to talk about phonics. It just comes naturally and they start to understand what the letters are saying. But the low groups, sometimes they really need some real direct training, so I'll take the low group and really go over those things. Try to make it somewhat interesting, make up cute little stories about the letters, and give it sort of a more of a whole language feeling, but that's the difference. But all of them get it. It's just the lower ones get it more.

Likewise, Beverly described how she distinguishes between low- and high-achieving students:

This is really bad, but I'm going to admit, (...) I think I give more encouragement to my culturally diverse high-achieving students than to any other group in my class. I really, really pay a lot of attention to those kids and a lot of attention to where they're going. And I think that they're the second, they're the second group I should be paying attention to. The first group is my low-achieving culturally — my at-risk. But I just am afraid that these kids, I could just, you know if they come from bad families but I know they're really smart and motivated, I pay a lot of attention to them and to their learning and to trying.

Beverly subsequently explained the complex distinctions she makes about these groups. In her view, social class, cultural diversity, and academic achievement are intertwined:

I don't teach them differently. I just give them a little bit more attention. You know, in a class of 30, you're going to have to give more attention to some kids than to other kids. and I give more attention to that group. I figure my, my upper middle class white kids do not need my attention that much. They do, and if I, if I had to give more attention to one specific group, my lower middle class, if we're dividing it up this way, which is horrible to divide it up this way, but I'm just gonna tell you raw how I'm thinking of it. My at-risk... I don't really have any... Maybe my low achieving Caucasian kids are still higher than some of my higher achieving culturally diverse learners. So I kind of figure that they're going to be okay too. Because the school system and basically the social structure of our country kind of takes care of those kids as well. And then I pay more attention to the group who is at-risk, culturally diverse at-risk kids. And unfortunately, the kids that need it are the other kids. But I'm afraid, well, this is so bad! You're going to make me feel so guilty! Anyway, that's what I do. Maybe next year, I'll do better. That's what I do.

I should note, however, that Beverly doesn't think that such differentiations are projected in her classroom behavior:

And it's not obvious. I mean, I don't have favorites. I think if you ask the kids in my class and if you ask parents, they would never know. I mean it's, the way I'm describing it to you, I'm just being very honest. I could have told you that I pay this equal attention to all kids and if you came in and observed my classroom, that's what you

would see. But I'm thinking about comments I give on kids' essays. I'm thinking about the kids I have stay in at recess or the kids I maybe give a little extra computer time to. I'm gonna give more computer time to my culturally diverse learners because they don't have computers at home.

- Evaluation of Student Performance. Both teachers manifested having difficulties with the assessment of learning. For instance, Ann reported that she uses her own perception of student performance. Many of the questions she asked herself when assessing pupils are directed at basic skills mastery — an aspect heavily emphasized in early elementary grades. To wit:

[I assess student learning] Very loosely. Very loosely. If I see — and it depends on, like the report card, for instance, sort of guides how I evaluate them. Because I don't really like evaluating. I'd rather just have a conversation with their parents, or write something, you know, write an essay about each student. But I have to write these specific notes on their report cards, the specific grades on their report cards. So like for a real specific mark on the report card, like if it says 'reading,' I think in terms of well, does this student have reading fluency at his, at about the expected level. Or does the student recognize some sounds? Are the phonetics going well? Is the student involved in literature? Does the student have comprehension of what's being read?

Likewise, Beverly said:

I'm having a hard time with assessment this year. It's a hard, it's something I'm struggling with because it's difficult, it's so, it's difficult to assess objectively, an oral project. I try and assess on the continuum, this student is making progress towards a grade level standard. And then I sort of have, well, okay, in this essay the kids wrote, for grade level they have to have capitalized all the letters... And I'll set up a rubric or criteria, and then I grade the kids on making — how much they're making progress toward that standard.

[Interviewer: Okay, so you try to combine those...]

I'm trying. I'm still working with my assessment. I don't like where my assessment is right now.

[Interviewer: Why?]

Um... For parents, I feel like I know where kids are, but that's just sort of a gut feeling and it's very subjective. And I feel that all of my assessment is subjective. And parents really need to see more than that. And it's hard for me to explain... It's hard to explain subjective grading to parents.

- Strategies for Diverse Classrooms. Before and after the course, Ann consistently selected a constructivist model to teach in diverse classrooms. However, during the follow-up interview, she explained that cultural diversity is addressed in her class as a topic and as a personal trait of pupils.



Um, when, when lessons um, when lessons have some sort of association, a natural association with talking about the diversity that exists in the classroom, we talk about it. When it comes up we talk about it. For instance, I don't even know how it came up, but somebody said something about skin color. And they started talking about skin color, so we just started talking about it. And I mean, anytime an opportunity arises, I jump on it, I say "oh, this is great." And, um, when it fits into units. Like I'm starting a unit of study on growing and changing, and so we're examining bodies and, you know, ourselves, and thinking about what our bodies look like, what our bodies do, what are the changes in our lives that have happened. So we can talk about immigration in terms of changes. We can also talk about the way our bodies look — skin color and things like that. And I intend to do that. So when it fits in naturally.

In addition, Ann addresses cultural diversity by letting students talk about their interests or about their lives. To wit:

And I think that also on the more, on the deeper level, I address it just by allowing all of the ideas that there are. I mean, I don't stop ideas when somebody starts talking about something. That, that idea of theirs is coming from somewhere. Something within in them; something within their diversity. And when their become — when an interest develops in the classroom over something, we'll all, we'll all learn about it. Everybody learns about it. And we just take it in. Like everybody started talking about animals. And some kid has a dad who works with animals. And, you know, other kids have chickens in their house. And everybody became interested, so I changed the unit of study to animals. That's an example of allowing the diversity of ideas to just sort of take hold of the class.

Beverly selected a single group approach (i.e., to celebrate diversity) at the beginning of the course. Interestingly, she expressed a view similar to Ann's during the follow-up interview. That is, she thought these issues must "(...) be student generated and have students bring up issues of diversity. Not so it's incorporated. And validating what they discuss by incorporating it into the curriculum as best I can."

## DISCUSSION

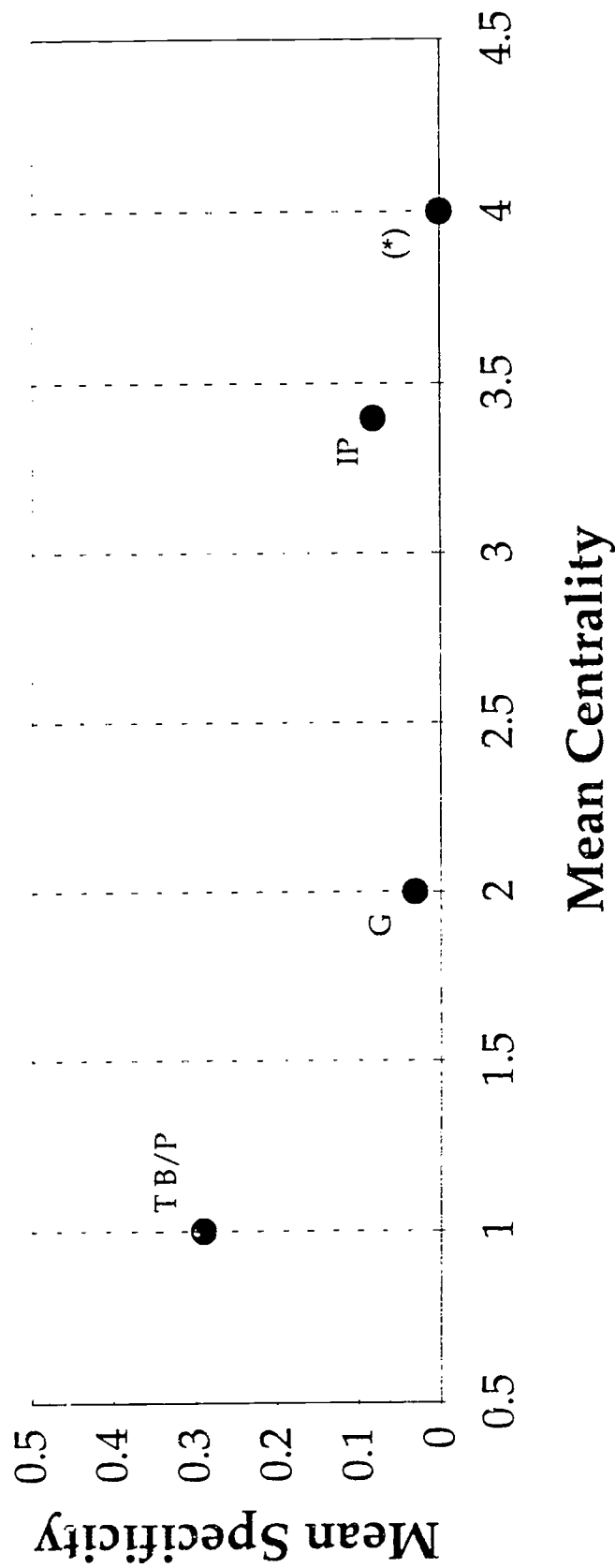
Although these teachers share some similarities, they exhibit rather distinct pathways in their changing conceptualizations of good teaching for diverse students. Although both teachers report that they rely on their own experiences and beliefs when teaching, it is interesting to note in their maps how Teacher Beliefs/Principles tended to fade away or to remain on the background of central categories. Ann tended to use, intuitively, her personal experiences while Beverly relies heavily on her family values to educate pupils. Accordingly, their teacher education program had a differential effect on them. Ann thinks of its influence as mostly positive, whereas Beverly is ambivalent about this issue. Furthermore, the ambivalence expressed by Beverly permeates other areas of thinking and teaching. For instance, she's now only "fairly certain" that she will remain a teacher. Also, although she thinks and believes constructivist approaches to learning and instruction and

bilingual education are the "right" approaches, she is not sure they work with some of her students.

In part, the educational system and/or the school culture are exerting great pressure in their professional development. Independent of how progressive their schools are, these teachers feel enormous pressure from the official curriculum, from the accountability system of schools to assess performance, and to group, assess, and instruct students. The concept map data and the belief interview reports show how these teachers are gradually shifting to a more mainstream view of diversity in which deficits are paramount explanations of pupil performance and social justice issues are not in the realm of teachers' labor. There appears to be a dissonance between what teacher education programs stand for in relation to diversity and what these novice teachers find in the color-blind (but "fair") culture of schools. From this perspective, many of these teachers' views were congruent with societal and school philosophies about multiculturalism before they enrolled in the TEP, but it seems that the TEP functioned as a "disturber" of their schemata.

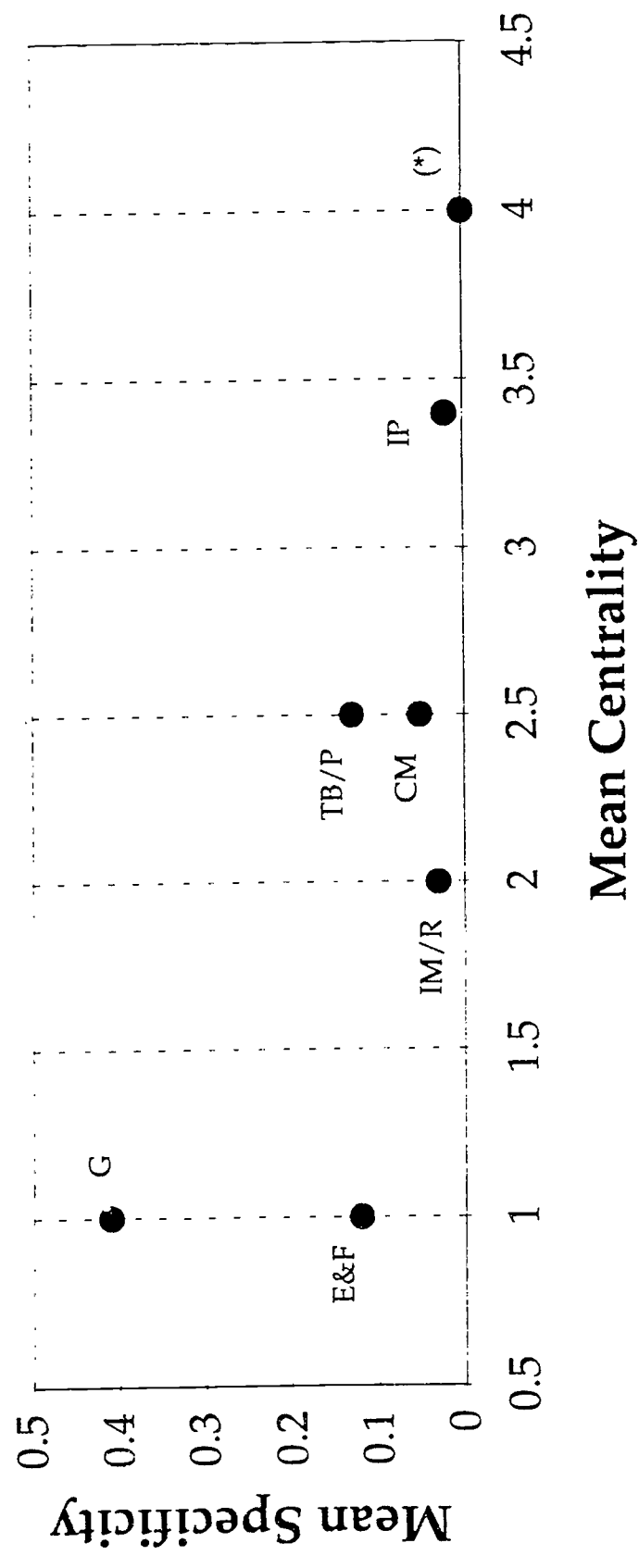
Interestingly, there are also real demands stemming from their lack of experience. These teachers are compelled "to get their acts together," and in this context, cultural diversity is seen as a separate concern that will be subsequently added to their work. This is reflected in their views of teaching for diversity as a topical concern or as a conversational style where everybody can contribute to the parallel but tangential agenda of diversity in the classroom. In addition, Ann and Beverly have "a little storage space in their heads" where they keep their "recipes" to do diversity in the class, but they open it only when there is time or relief from the "other" duties. Indeed, these findings question the traditional model used in TEPs to prepare teachers for diversity in which the content is infused, but little effort is devoted to transform the surrounding school systems.

**Figure 1. Preconcept Map - Ann**



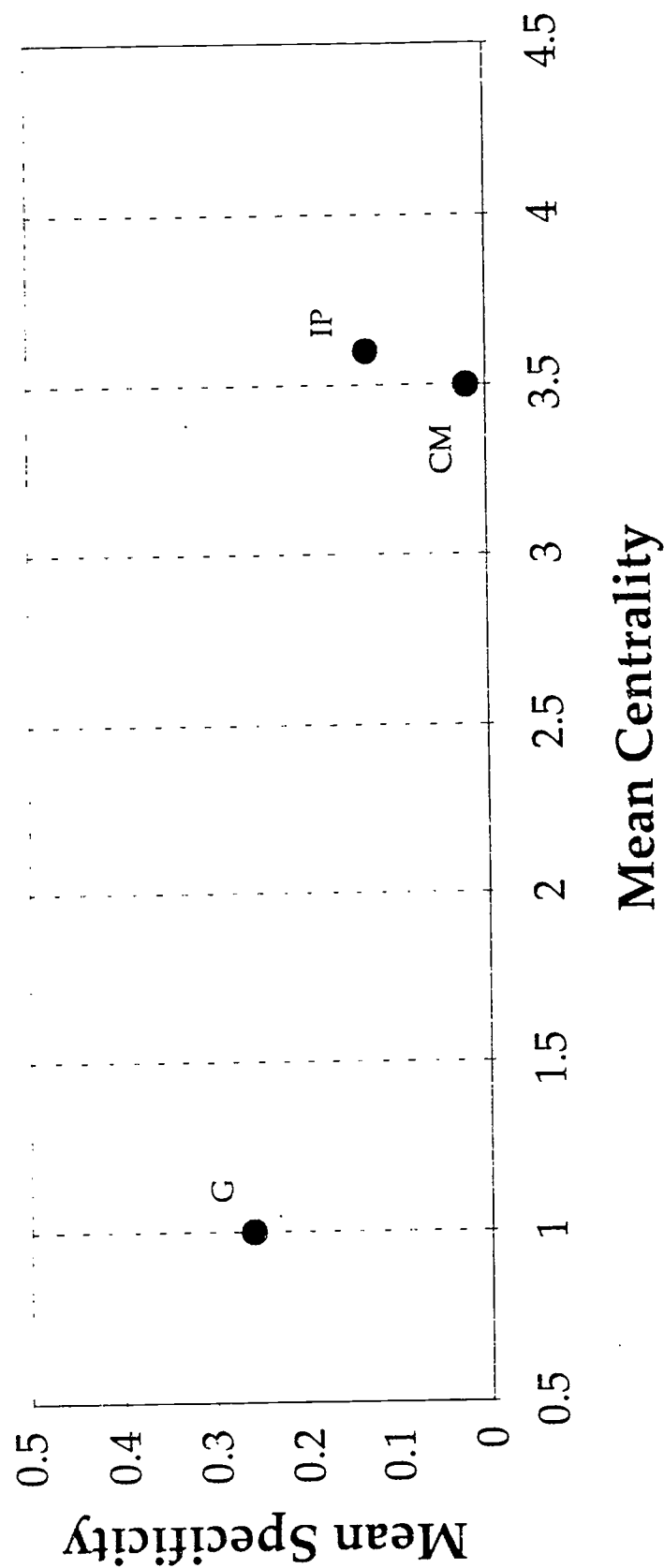
(\*) = SC/B; P. INV.; SI; LU/P; CM; P. ISS.; C; IM/R; E

Figure 2. Postconcept Map - Ann

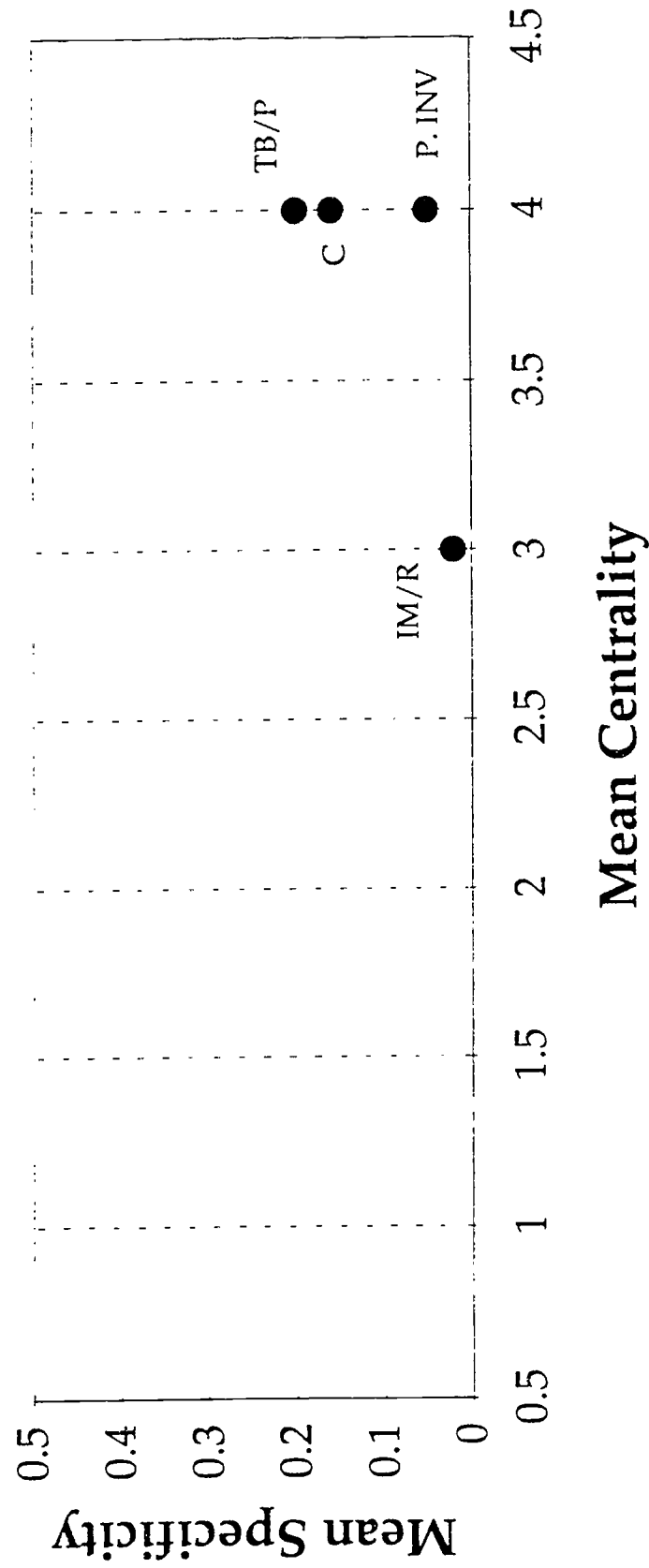


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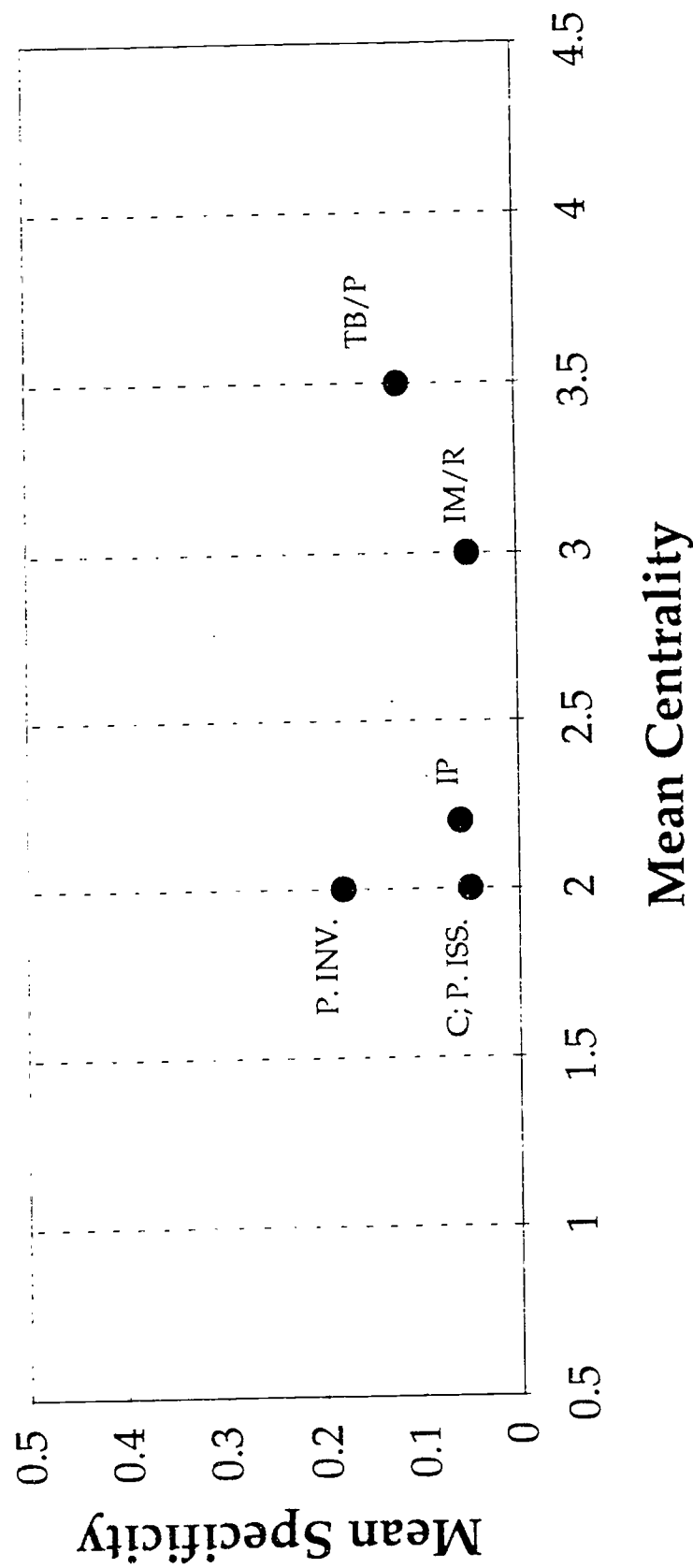
**Figure 3. Follow-Up Concept Map - Ann**



**Figure 4. Preconcept Map - Beverly**



**Figure 5. Postconcept Map - Beverly**



**Figure 6. Follow-Up Concept Map - Beverly**

